

melted by adding a little water, and bringing it to the boiling point, but it must not boil for any length of time. It should not be thick when fed, but of the consistency of thin molasses. Before feeding begins it would be well to arrange the brood nest. The centre of the hive should contain two or three combs, empty in the centre and lined about the top and ends with sealed honey. Other frames of comb, heavy with honey may be placed at the sides until the hive is filled. During the autumn months we often find frames of combs full of pollen near the brood nest. These should be removed, and frames of honey inserted in their places; past experience has shown that it is not best to confine bees to frames of pollen as a winter food, as it has a tendency to produce an unhealthy condition. Pollen is only necessary when brood rearing is carried on, and should be removed when not needed, but it should be returned the following spring, as early as the weather will permit.

Bees surely need some other treatment during winter than leaving them out in ordinary hives. Different modes of wintering have been adopted, but two methods are most in vogue. One is to place them in cellars, and the other in chaff protection on summer stands, or in other words, in chaff hives. The latter plan is the most extensively practiced. The chaff hive is an outside box or shell, enclosing the hive of bees and much larger. It admits a packing space of two or three inches around the sides, ends and bottom, and from six to ten inches over the top. It is not best to stint this space for packing. We have used chaff hives of different sizes and invariably find the largest size to be the best: four inches of packing space and twelve above the colony, have never failed to give better results than two inches below and six above. A separate shell for chaff is much better than a double walled hive with the space filled with chaff. The hives may be set in or taken out and may be of either one or two stories, the upper story or surplus chamber being removed in autumn, and the whole space filled with loose chaff. In this manner the chaff entirely surrounds the bees with the exception of the entrance, which should be left open, so that the bees may come forth at will when the weather permits. The covering over the bees, and directly under the chaff, should consist of a cloth only, and no board or wood covering should be used. The cloth covering will allow the moisture arising from the bees to pass off, and the chaff above will absorb it; thus the colony will be kept dry. Bees should be placed in winter quarters before cold weather comes and left during winter in perfect quiet. Any disturbance during cold

weather is damaging to them. The apiary should be secluded entirely from stock of any kind, and even a constantly travelled pathway close to the hives is undesirable. Apiaries should not be located close to railroad for this reason. If any colony is found destitute of stores at any time during the winter, a frame of sealed honey can be given to save them; if this is not at hand, slabs of candy can be made from granulated sugar and placed on the frames over the cluster where the bees have access to it. Feed-syrup of any kind must be avoided during winter.

A. H. DUFF.

Ohio.

PROVINCIAL PRIZE WINNERS.

Display of extracted honey in marketable condition, A. J. Cumming, Warina.

Display of honey in the comb and in marketable condition, 1st A. J. Cumming, Warina.

Honey in the comb, not less than 10 lbs.—1st A. J. Cumming; 2nd, A. Landry, Thornbury; 3rd, C. Grant, Thornbury.

Jar of extracted honey—1st A. Cumming, 2nd A. Knight, Cataragui.

Beeswax, not less than 10 lbs.—1st, A. J. Cumming, Warina.

Bee hive, 1st and 2nd, A. J. Cumming, Warina.

Best wax extractor—A. J. Cumming, Warina. Best honey extractor—A. J. Cumming, Warina.

Display of aparian supplies, silver medal, A. J. Cumming, Warina.

Mr. Cumming made a clean sweep, carrying off all the first prizes and the silver medal. His total winnings amount to \$40. The supplies exhibited by him were from the Jones Company, for whom he is agent.

From the American Bee Journal.

Have Bees the Sense of Hearing?

THIS is a matter, it seems to me, capable of demonstration. That bees do hear in some sense which answers to the sense in which other animals hear, I have every reason to believe. That bees pay no attention to the ordinary din and clash of the outer world about them, proves nothing at all, for the same is true, in a limited sense, with all living creatures.

My grounds are bounded on the one side by a railroad, and from 10 to 14 trains pass by every day. My stock graze in the pasture undisturbed—they rarely ever raise their heads when a train thunders by. The same is true with my bees—they work right along as though all was silent. But if I drop some young bees on the ground, they will find the entrance to the hive if they are in hearing distance of the bees at the en-